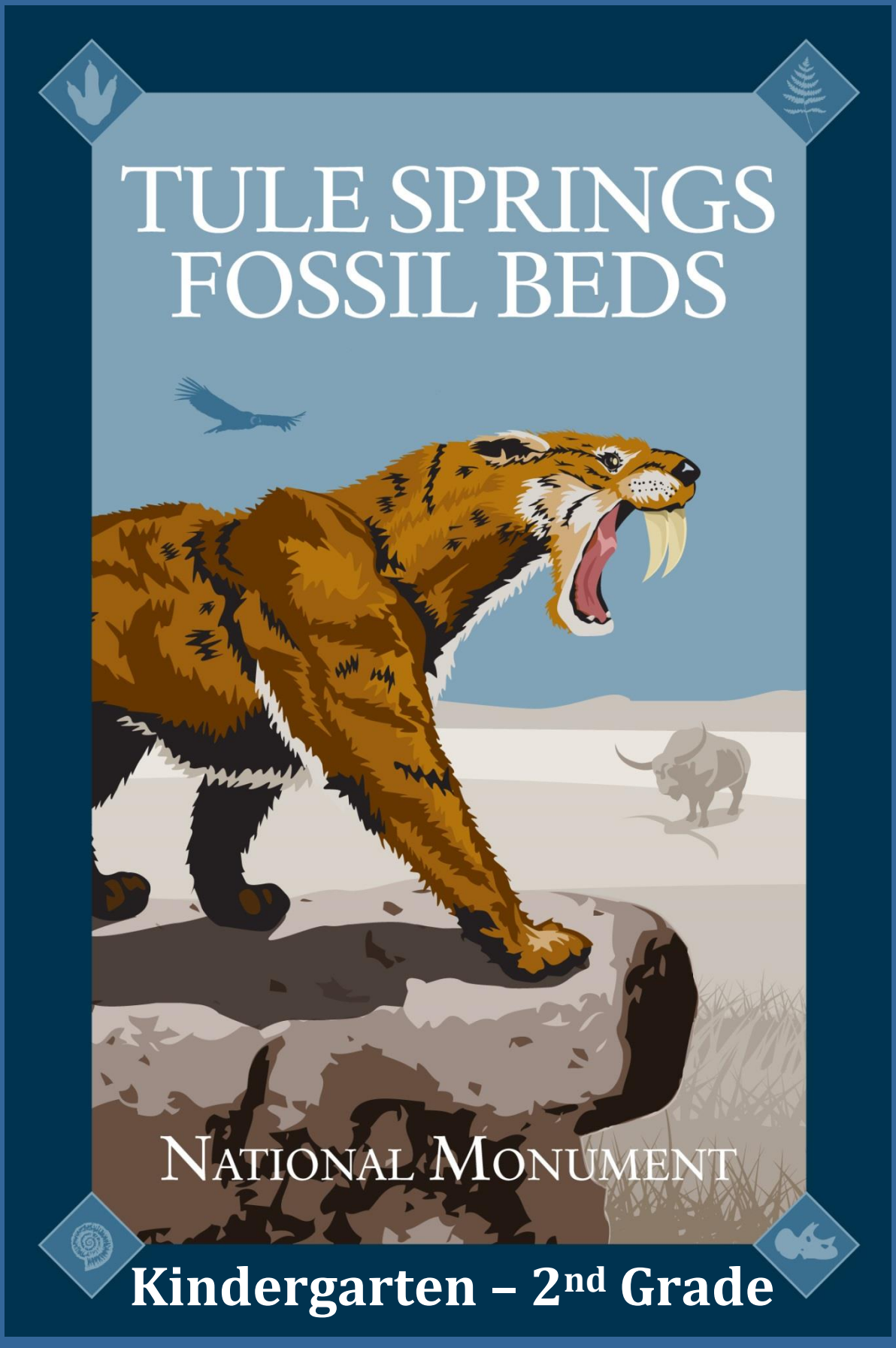
Teacher Resources



Kindergarten – 2nd Grade

Tule Springs Fossil Beds National Monument is one of our newest National Park Service sites and it is located right here in the Las Vegas Valley. The National Park Service and our partners, the Protectors of Tule Springs, are pleased to be a great resource for teachers looking for innovative ways to teach topics through the amazing resources of this fossil site.

The park preserves an amazing collection of fossil sites that have the potential to help us learn about a specific segment of the Pleistocene Era, also referred to as the Ice Age. Within the chalky soils of the park a wide range of animals are preserved. They include large, iconic animals like Columbian Mammoth, Shasta Ground Sloth, two extinct species of Bison, camel, and horses. These animals were drawn here at a time where the climate was cooler and damper and supported a variety of plants fed by spring waters. Where there are plant eaters, there are meat eaters. Saber-toothed cats, American lions, and dire wolves were fierce and canny predators. All of these animals are found in the soils of Tule Springs and many have been collected by paleontologists.

The park is in its infancy. It does not have a visitor center or facilities. We are entering the planning phase to determine what this national park site should offer. Undoubtedly, there will be a curriculum-based education program. We will need the assistance of dedicated teachers, like you, to help develop this curriculum so that it meets your needs.

Within this packet are some grade-specific activities that will allow you to introduce the idea that right here in our own backyard, fossils are preserved that tell us much about the world in which we live. We hope you find time to introduce the park to your students and we look forward to working with you on this exciting endeavor. We are grateful to the Waco Mammoth National Monument and Clark County educators for permission to use their activities.

NATIONAL PARK SERVICE

Protectors of Tule Springs

www.tulespringslv.com

What's for Dinner?

Concepts

- We can make hypotheses about how ancient animals survived by observing tier physical structures.
- Careful observation and hypotheses can help us figure out thing we don't know.

Objectives

- Students will observe the shape of animals' teeth to determine whether they are carnivores or herbivores.

Review the idea that we can determine what an animal ate by observing the shape of its teeth. Paleontologists use visual clues like teeth shape to help determine what long extinct animals ate for food.

Herbivores, or plant eaters, have strong, flat molars that grind up leaves. Their canine teeth, if they have them, are small.

Carnivores, or meat eaters, have prominent canine teeth for tearing at meat and usually a limited number of molars.

Omnivores are animals that eat both meat and plants. They have a combination of sharp front teeth for tearing meat and flat molars for grinding plant materials.

You can show students some examples of living animals and have them determine what is the animal's diet. Example of familiar animals to Ice Age animals they will see in pictures:

- Cats (domestic cats, mountain lions, jaguars, etc.)
- Dogs (domestic dogs, wolves, coyotes, etc.)
- Horses
- Elephants
- Bears

Explain that this concept can also be applied to extinct animals, and that making careful observations about fossils can give us important clues about how animals survived.

What's for Dinner? Observations

Talk about any animal in the pictures and form a hypothesis about what you think it ate.

Make sure you give evidence for your conclusion!

Animal: _____

Diet: _____

Evidence: _____

_____

_____

Draw the animal's teeth:

Fossil Finders!

Concepts

- Fossils come in many shapes and sizes.
- Fossils can be both animals and plants.

Objectives

- Students will compare different animals in pictures.
- Students will identify observable characteristics of fossil animals and plants.

Outline

We can describe animals in many ways: their relative size, how many legs they have, and by their external features. Review these characteristics with students.

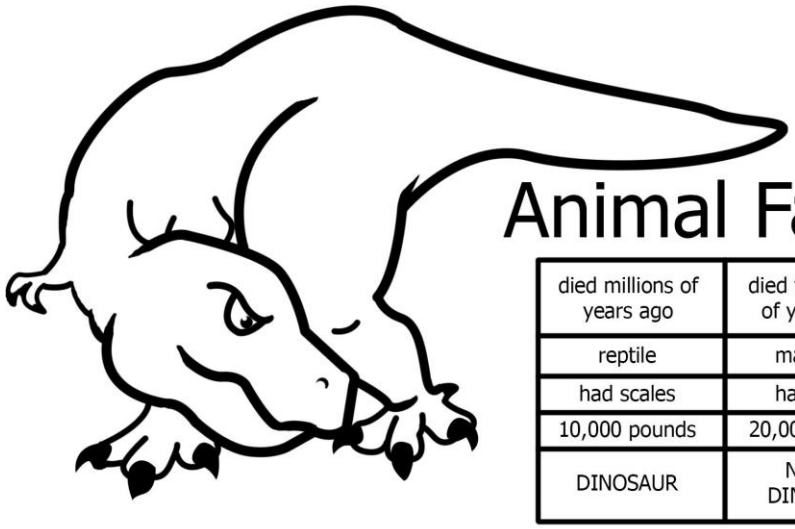
1. Find an animal larger than you. What did you find? Try walking like that animal.

2. Find an animal smaller than you. What did you find? Draw it in the space below.

3. Find an animal that is about the same size as you. What did you find? Name it.

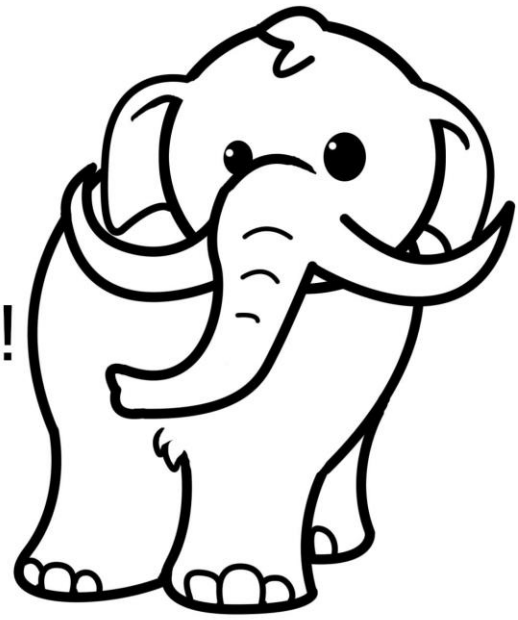
Name:

I AM NOT A
DINOSAUR!



Animal Facts!

died millions of years ago	died thousands of years ago
reptile	mammal
had scales	had hair
10,000 pounds	20,000 pounds
DINOSAUR	NOT A DINOSAUR



TYRANNOSAURUS REX

COLUMBIAN MAMMOTH

Designed by Dava Butler for the Waco Mammoth Site, August 2014.

Name: _____Date: _____

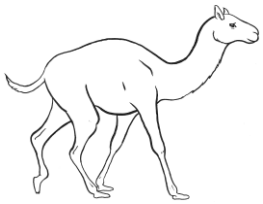
Mammoth at Tule Springs

Color by the numbers!

1=BLUE · 2=LIGHT BLUE · 3=GREEN · 4=LIGHT GREEN · 5=DARK GREEN

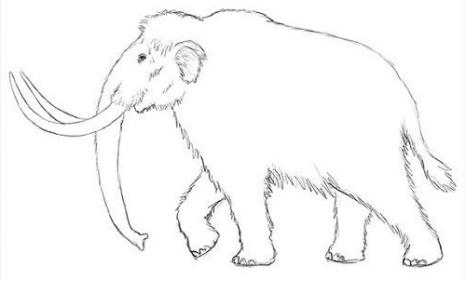
6=BROWN · 7=GRAY · 8=YELLOW · 9=YELLOW-ORANGE

Name: _____ Date: _____



Ice Age Syllables

Tap the syllables as you say each word, and then circle the number of syllables each word has.



MAMMOTH 1 2 3	CAMELOPS 1 2 3
SMILODON 1 2 3	GROUND SLOTH 1 2 3
BISON 1 2 3	DIRE WOLF 1 2 3
HORSE 1 2 3	CONDOR 1 2 3